WORK SHEET

Module 6 Calculating Feet Traveled Per Second

Name_____ Date_____

Calculating Feet Traveled Per Second Formula Score_____

One mile = 5,280 feet

The formula:

5,280 feet ÷ 60 min ÷ 60 Sec = 1.467 feet traveled per second

or simplified method:

speed (say it's 30mph) ÷ 2 = 15 + speed (30mph) = 45 feet/second traveled

INSTRUCTIONS

Use the formula to calculate the distance a vehicle travels at these various speeds.

25mph = _____

35mph = _____

45mph = _____

55mph = _____

65mph = _____

75mph = _____

Solve this problem:
John travels to school every day averaging 30mph. (This time does not account for any stops, delays, etc., which does not typically occur!) He travels 6 miles one way. How long does it take him to get to school?

John is late one day and increases speed to 40mph. How much time does he save?

WORK SHEET Answer

Module 6 Calculating Feet Traveled Per Second

Use the formula to calculate the distance a vehicle travels at these various speeds.

25mph = _____37.5_____

35mph = _____52.5_____

45mph = _____67.5_____

55mph = _____82.5_____

65mph = _____97.5_____

75mph = _____112.5_____

John travels to school every day averaging 30mph. (This time does not account for any stops, delays, etc., which does not typically occur!)

He travels 6 miles one way. How long does it take him to get to school?

- 30mph x 1.467 = 44 feet per second traveled
- 44 feet x 60 seconds in a minute = 2640 feet per minute (1/2 mile)
- 6 miles x 5,280 feet (mile) = 31,680 feet in 6 miles
- 31,680 feet (6 miles) ÷ 2640 feet (minute) = Takes 12 minutes for 6 miles

John is late one day and speeds up to 40mph. How much time does he save?

- 40mph x 1.467 = 58.5 feet per second traveled
- 58.5 x 60 seconds = 3510 feet per minute
- 6 miles x 5280 = 31680 feet in 6 miles
- 31680 feet ÷ 3510 = 9 minutes

He may get there 3 minutes earlier, if he doesn't get stopped by law enforcement in which case he will really be late! He would benefit by not leaving for school late.